

R E M A R K S

This is in response to the Office Action that was mailed on March 10, 2005. In a sincere effort to advance the prosecution of this application, Applicants propose to separate claim 1 into plural independent claims. The features (ii) and (iii) in claim 1 are now found in independent claims 18 and 1, respectively. The feature (i) is deleted from claim 1. The feature (iii) is recited in claim 1, which is directed to cellulose acetate, with specifying the amount of metals and a flake slurry pH. The minimum amount of the metal components is defined by 0.01×10^{-6} equivalent, based upon lines 5-14 on page 19 of the specification. Similarly to in claim 1, a flake slurry pH is defined in claim 11. Based upon such disclosure as that in lines 3-8 on page 26 of the specification, the flake of the composition as well as the flake of the cellulose acetate is claimed regarding the flake slurry pH. The feature (iii) is now recited as features (iiia) and (iiib). The amount of acids or metal salts thereof is based upon claim 8. In feature (iiib), claim 11 refers to a combination of the feature (ii) and the total content of an alkaline metal and/or an alkaline earth metal in 1 gram of the cellulose triacetate in a proportion of more than 5.5×10^{-6} (in terms of ion equivalent", based on lines 1-4 on page 27 of the specification. Claim 18, directed to a dope, recites the features (ii), (iiia), or (iiib) similarly to claim 11. New claims 28-33 are based upon original claims 15 and 16 and on

lines 10-21 on page 5 of the specification. The proposed changes to the claims are also intended to obviate the formal rejection that was set forth in the Office Action. Claims 2-8 and 26 are cancelled, without prejudice. No new matter is introduced by the present Amendment. Entry of this Amendment - in order to place the application into condition for allowance or into better condition for appeal - is respectfully solicited. Claims 1, 9-13, 18, 20, 23, and 27-33 are pending in the application.

Claims 1, 13, 27, 28, and 31 are drawn to a cellulose acetate. Claims 9, 10, 18, 23, 30, and 33 are drawn to a dope containing a cellulose acetate, and claim 20 is drawn to a method of using the dope. Claims 11, 12, 29, and 32 are drawn to a composition comprising a cellulose acetate.

Claims 1, 4-10, 26, and 27 were rejected under the second paragraph of 35 U.S.C. §112 as failing to define the invention properly. The difficulty noted by the Examiner is that feature (ii) actually contemplates a second component in addition to the cellulose acetate recited in the claims. The language of the claims is amended to address this issue. It is respectfully urged that the claims in their present form satisfy the requirements of the statute.

Claims 1-10, 18, 26, and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by JP 2-251607 (Uenishi). Claims 1-

13, 18, 26, and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Uenishi. The rejections are not believed to be applicable to the claims in their present form.

Although Uenishi refers to "the organic acid in a proportion of 0.5 to 5 mol relative to the very small amount of metal ions in the cellulose ester solution", Uenishi fails to teach the present amount of metal components in cellulose acetate and a smaller amount of acid components in cellulose acetate. It is noted that the content of citric acid (20 ppm) in cellulose triacetate in the Uenishi Example corresponds to 3.4×10^{-4} mol/g, which is significantly different from the amount of acid components in the present claims. Furthermore, Uenishi fails to teach the technical role of these amounts as well as a flake slurry pH for improving stability (including thermal stability) and releasability of a film from a support.

Claims 1-3, 13, 18, 20, 23, and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by WO 96/30412 (Kiyose). Claims 1-3, 11, 12, 18, 20, 23, and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by JP 57-182737 (Yabe). Claims 1-3, 13, 18, 20, 23, and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kiyose. Claims 1-3, 11-13, 18, 20, 23, and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yabe. The rejections are not believed to be applicable to the claims in their present form.

Koyose fails to teach or suggest not only the amount of metal components in the presently claimed cellulose acetate but also the amount of acid components as well as the flake slurry pH of cellulose acetate of the present invention.

Yabe likewise fails to teach or suggest the amount of acid components as well as the flake slurry pH of the cellulose acetate derivatives recited in the present claims.

UNEXPECTED RESULTS. It is respectfully submitted that the PTO has failed to establish a sustainable *prima facie* case of obviousness against the present invention. Nevertheless, Applicants present herewith a Declaration under 37 CFR 1.132 of Dr. Tohru Shibata. Dr. Shibata's Declaration establishes that the present invention provides remarkable and unexpected benefits. Dr. Shibata prepared and tested six Samples (A-F). The results of stability testing are reported in Table 1 of the Declaration, which is reproduced below. In the Declaration, Sample E corresponds to the Kiyose and Yabe disclosures and Sample F corresponds to the Uenishi disclosure.

Table 1

| Sample | Flake Slurry pH | Metal content ion equivalent ($\times 10^{-6}$) | Generated acetic acid (%) |
|--------|--------------------|---|---------------------------------|
| A | 4.89 | 4.9 | 0.028 |
| B | 5.15 | 3.55 | 0.033 |
| C | 4.99 | 2.67 | 0.059 |
| D | 4.83 | 2.66 | 0.095 |
| E | 4.26 | 0.32 | 0.219 |
| F | 4.0 | 0.32 | 0.255 |

In Dr. Shibata's Declaration, stability was evaluated based upon the

amount of acetic acid generated. As is apparent from Table 1 of the Declaration, Sample F (Uenishi) affects the stability of cellulose triacetate adversely, since Sample F contains a small amount of metal (0.32×10^{-6} ion equivalency). Sample E (Kiyose and Yabe) also fails to improve the stability of cellulose triacetate, since Sample E likewise contains a small amount of metals. Both Sample E and Sample F generated more than 0.2% acetic acid, which means that the samples are relatively unstable. These results confirm the results of the Comparative Examples presented in Applicants' specification - see e.g. Comparative Example 3, page 36, lines 15-17. In contrast, the present invention provides remarkably improved stability, as shown by Samples A-D (containing from 2.66×10^{-6} to 4.9×10^{-6} metal ion equivalency). Each of Samples A-D generated less than 0.1% acetic acid, which means that these samples are relatively stable. Nothing in the cited prior art suggests that stability can be improved in this way by adjusting the parameters of the cellulose acetate as recited in the present claims. Moreover, the releasability of cellulose triacetate is also improved, as is apparent from the Examples in the specification.


In view of the above amendments and Remarks, the Examiner is respectfully requested to withdraw all rejections of record and to pass this application to Issue. If there are any questions, the Examiner is respectfully requested to contact Richard Gallagher (Reg. No. 28,781) at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 CFR 1.16 or under 37 CFR 1.17, particularly extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By

 #28,781
Raymond C. Stewart #21,066

RCS/RG

P. O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000